

REMARKS

The Official Action dated November 28, 2003 as well as the Advisory Action of March 31, 2004 have been received and their contents carefully noted. In view thereof, claims 1 and 4 were amended in Applicant's response filed February 27, 2004, and claims 1 and 6 have been further amended in the present Preliminary Amendment in order to clarify the present invention set forth therein and to place the present application in condition for allowance. As previously, claims 1, 2 and 4 through 10 are presently pending in the instant application.

With reference now to the Official Action of November 28, 2003, particularly page 2 thereof, claim 4 was objected to as depending from a canceled claim. As can be seen from the amendments filed February 27, 2004, which should now be entered and fully considered by the Examiner, claim 4 has been amended to now properly depend from independent claim 1 rather than previously canceled claim 3. Accordingly, it is respectfully submitted that Applicant's claimed invention is now in proper formal condition for allowance.

With reference now to paragraph 3 of the Official Action, claims 1, 4, 6 and 8-10 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,969,745 issued to Blocker. This rejection is respectfully traversed in that the patent to Blocker neither discloses nor remotely suggests that which is presently set forth by Applicants' claimed invention.

As the Examiner can readily appreciate, each of independent claims 1 and 9 recite a semiconductor device including a semiconductor substrate, two semiconductor components provided on the principal surface of the substrate and multiple through holes which pass in front of the principal surface through the back side of the substrate are provided in a region of the substrate between the two adjacent components and a conductor film formed directly on the side faces of the through holes. Clearly, Applicants' claimed invention recites a semiconductor device which includes multiple through holes provided between the two adjacent components so as to increase isolation between the adjacent components while maintaining the strength of the substrate.

Further, with respect to claim 1, this claim has been further amended, hereinabove, to specifically recite two adjacent semiconductor components and that the through holes are

provided in a region of the substrate sandwiched by the two adjacent semiconductor components. Clearly, the patent to Blocker fails to disclose such features.

As noted in the Response filed February 27, 2004, independent claim 6 recites a similar structure wherein the first group of through holes are of one type and the second group of through holes are of another type such that the first type of through holes are different from the second type of through hole with the second type of through hole increasing isolation between the adjacent components while maintaining the strength of the substrate. Further, as can be seen from the foregoing amendments, claim 6 further recites that the second group of through holes are provided in different locations from the first group of through holes.

In reviewing the patent to Blocker, it is noted that this reference mainly discloses that each of the plurality of surfaces includes a through hole in a semiconductor device; in this case a field effect transistor, and clearly fails to disclose how the through hole is provided between the two components and particularly between two adjacent components as is recited by Applicants' claimed invention. Further, the Blocker clearly fails to disclose that the types of through holes are different.

While the Examiner in the Official Action of November 28, 2004 states that there are multiple through holes between a source electrode 10a and a source electrode 10d, it is clear from Figs. 2 and 3 of the Blocker reference that the source electrode 10a is not adjacent to the source electrode 10d and is separated by source electrodes 10b and 10c. Moreover, it is noted that the through holes referred to by the Examiner are formed in the respective source electrodes 10a through 10d and not between two adjacent components, nor are the second group of through holes provided in different locations from the first group of through holes as is specifically recited by Applicants' claimed invention.

Moreover, with respect to independent claim 6, the types of through holes set forth by Blocker are clearly all identical to one another and are not of different types as is specifically recited by Applicants' claimed invention. Accordingly, it is respectfully submitted that each of independent claims 1, 6 and 9 as well as those claims which depend therefrom clearly distinguish over the teachings of Blocker and are in proper condition for allowance.

With reference now to page 3 of the Official Action of November 28, 2004, claim 2 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Blocker. This rejection is likewise respectfully traversed in that the patent to Blocker neither discloses nor remotely suggests that which is presently set forth by Applicants' claimed invention.

Further to the remarks set forth hereinabove, as noted in Applicant's Response filed February 27, 2004, claim 2 is directly dependent upon independent claim 1 and includes all limitations thereof. Accordingly, it is respectfully submitted that dependent claim 2 is likewise believed to be in proper condition for allowance.

Referring now to paragraph 6 of the Official Action of November 28, 2004, claims 5 and 7 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Blocker as applied to claim 1 above, and further in view of U.S. Patent No. 5,959,905 issued to Payne. This rejection is respectfully traversed in that the patent to Payne does nothing to overcome the aforementioned shortcomings associated with the teachings of Blocker.

While the Examiner states that the Blocker reference discloses the claimed invention except for multiple transistors and relies on the teachings of Payne as disclosing multiple transistors, as discussed hereinabove as well as in Applicant's Response filed February 27, 2004, the patent to Blocker clearly fails to disclose or remotely suggests Applicants' claimed invention as set forth in independent claims 1 and 6. Consequently, it is respectfully submitted that dependent claims 5 and 7 clearly distinguish over the prior art of record for the aforementioned reasons.

Additionally, it is noted that the Office Action Summary page at 2a of the Official Action dated November 28, 2004, indicates that the Official Action has been made final; however, there is no indication in the Official Action that the action is in fact made final by the Examiner. Several telephone calls to the Examiner failed to resolve this issue.

In this regard, it is respectfully submitted that the Official Action cannot be properly made final in that independent claim 6 has been rejected based on newly cited prior art which was not necessitated by Applicants' amendments. As set forth in MPEP § 706.07(a):

"second or any subsequent actions on the merits shall be final, except
where the examiner introduces a new grounds of rejection that is neither

necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in ...”

In the instant application, independent claim 6 was not amended at all in the previous response filed August 19, 2003, nor was the Block reference recently cited by the Applicant. Furthermore, despite Applicant's previous request, the Examiner never addresses this issue in the Advisory Action of March 31, 2004. Accordingly, it is once again, respectfully requested that the Examiner indicate that the Official Action of November 28, 2004 in fact should have been a non-final Office Action and have the Office Action Summary page reflect such. Furthermore, in doing so, Applicant respectfully submits that the filing of the concurrent RCE is not necessary and any amounts charged to Applicant's Representatives deposit account for the filing of the RCE be refunded. Should the Examiner maintain his position in this regard, it is respectfully requested that this be considered a Petition to the Director under 37 CFR 1.181 requesting review of the finality of the Official Action of November 28, 2003.

Therefore, in view of the foregoing, it is respectfully requested that the finality of the Office Action of November 28, 2004 be withdrawn by the Examiner, that the objections and rejections of record be reconsidered on withdrawn by the Examiner, that claims 1, 2, and 4-10 be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the instant application, she is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,



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